



GENERAL EDUCATION AND TRAINING CERTIFICATE: MANUFACTURING, ENGINEERING & RELATED ACTIVITIES

COURSE INFORMATION

SAQA ID: 23253

NQF Level: 1

Learnership Duration: 12 months

Credits: 125

Contact Sessions: Minimum contact session, including remediation (if required), and Portfolio Building for this Qualification is **25 Days**.

Accrediting SETA: Manufacturing, Engineering and Related Services Sector Education & Training Authority (MERSETA)

PURPOSE

This qualification specifies the key skills, knowledge and values required to access engineering and manufacturing qualifications in the Further Education and Training Band. It describes the learning outcomes required to participate in workplace-based learning programmes for occupationally focused qualifications in the manufacturing, engineering and assembly sectors.

ENTRY CRITERIA

- Communication and Numeracy competency at ABET Level 3.

MARKET INFORMATION

Target Market: Electricians • Civil Engineers • Engineers • Manufacturers

Target Industries: Manufacturing • Engineering • Assembly industries

COURSE INFORMATION

- **Mentor Requirements:** Mentor must have at least 3 years of experience in a Wholesale and Retail Environment.
- **Workplace Approval:** MERSETA approval required
- **Workplace Requirements:** Learners must be exposed to all Outcomes related to this qualification.

SKILLS OUTCOMES

1. Describe and explain a specific manufacturing, engineering or assembly process, relate the tools and materials to the process and explain the science and technology which underpins the conversion processes.
2. Demonstrate in the process of assessment the use of appropriate numeracy and communication skills.
3. Describe and explain, in the context of a specific workplace environment, the procedures and policies which govern that specific working environment.
4. Describe and explain the purpose of a specific business.



5. Describe and explain how the NQF enables the learner to select a learning path and identify the skills and qualifications that will enable him/her to achieve his/her goals and targets.

GENERAL INFORMATION

Credit Accumulation Transfer (CAT): CAT exemption is only applicable to approved learners. Approved learners will have reduced contact days. Learners who do not meet the CAT requirements will be required to complete Module 1 and Module 2 of this qualification.

FISA Requirements: Final Integrated Summative Assessment is the requirement for the successful completion of this learnership.

Recognition of Prior Learning (RPL): RPL is available for this qualification

UNIT STANDARDS

Unit Standards

Cluster 1 Orientation to Manufacturing and Engineering

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	13165	Describe the properties of materials found in the workplace and describe their impact on the environment	6
Core	13171	Describe and show how the NQF can help me to plan a learning and career pathway	5
Fundamental	12469	Read and respond to a range of text types	6
Fundamental	12471	Explore and use a variety of strategies to learn (revised)	5
Fundamental	12473	Identify and respond to selected literary texts	5

Cluster 2 Policies, Procedure and Governance within the Manufacturing and Engineering Industry

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	13162	Identify and describe inputs, outputs, stages and quality indicators of the manufacturing, assembly or engineering process	10
Core	13176	Describe and discuss basic issues relating to the nature of business, the stakeholders in a business and business profitability	3
Core	13995	Demonstrate an understanding of contracts and their sources	2
Core	13996	Identify, discuss, describe and compare major economic systems, with emphasis on the South African economy	2
Core	13998	Demonstrate an understanding of the principles of supply and demand, and the concept: production	2

Relationship between Human Development and Resources

Fundamental	7489	Show, explain, discuss and analyse the relationship between society and natural environment	4
Fundamental	10229	Discuss development, utilisation and management of human and natural resources	4
Fundamental	12470	Write for a variety of different purposes	6
Fundamental	12462	Engage in a range of speaking and listening interactions for a variety of purposes	6



Cluster 3 Health and Safety Measures in the Workplace

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	13169	Describe and discuss issues relating to HIV-AIDS, TB and sexually transmitted illnesses and their impact on the workplace	4
Core	13174	Identify and discuss inappropriate behaviours in the workplace	2
Core	12537	Identify personal values and ethics in the workplace	4

Basic principles of Natural and Scientific Sciences

Fundamental	7508	Conduct an investigation in the natural science	4
Fundamental	7509	Apply basic concepts and principles in the natural sciences	5
Fundamental	7513	Assess the impact of scientific innovation on quality of life	2

Cluster 4 Interpretation of Mathematical Models and Tools

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	13159	Care for, select and use hand and measuring tools	4
Elective	7452	Describe, represent and interpret mathematical models in different contexts	6

Numeracy and Communication Skills

Fundamental	7451	Collect, analyse, use and communicate numerical data	2
Fundamental	7450	Work with measurement in a variety of contexts	2
Fundamental	7463	Describe and represent objects and the environment in terms of shape, space, time and motion	2
Fundamental	7448	Work with patterns in various contexts	4
Fundamental	7447	Working with numbers in various contexts	6

Cluster 5 General Workplace Safety and Conduct Procedure s

Outcome	SAQA ID	Name of Unit Standard	Credits
Core	13167	Identify potential hazards and critical safety issues in the workplace	2
Core	13172	Understand the employer/employee relationship	3
Fundamental	13157	Read, interpret and understand information on a payslip	2

Interpreting work documents

Fundamental	7449	Critically analyse how mathematics is used in social, political and economic relations	2
Fundamental	7507	Demonstrate an understanding of the concept of science	2
Fundamental	7461	Use maps to access and communicate information concerning routes, location and direction	1